Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

(For all sources except PSD and true minor sources)

Completed by: Ben Markin

GENERAL INFORMATION:

Name:	Thoroughbred Generating Company, LLC
Address:	701 Market Street, 6th Floor
	St Louis, Missouri 63101
Date application received:	March 01, & October 26 (Revised), 2001
SIC/Source description:	4911/ Electric Generation
AFS(10-digit) Plant ID:	21-177-000177
Application log number:	53619
Permit number:	V-02-XXX

APPLICATION TYPE/PERMIT ACTIVITY:

[X] Initial issuance	[ ] General permit
[ ] Permit modification	[ ]Conditional major
__Administrative	[X] Title V
__Minor	[ ] Synthetic minor
__Significant	[ ] Operating
[ ] Permit renewal	[X] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[ ] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[ ] SIP
[X] PSD	[ ] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:017, 1(2)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

[X] Acid rain source

[X] Source subject to 112(r)

[ ] Source applied for federally enforceable emissions cap

[ ] Source provided terms for alternative operating scenarios

[ ] Source subject to a MACT standard

[X] Source requested case-by-case 112(g) or (j) determination

[ ] Application proposes new control technology

[X] Certified by responsible official

[X] Diagrams or drawings included

[ ] Confidential business information (CBI) submitted in application

[ ] Pollution Prevention Measures

[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM	1,328	1,328
SO_2	10,954	10,954
NOx	6,029	6,029
CO	6,599	6,599
VOC	509	509
LEAD	NA	NA
H2SO4	326	326

SOURCE PROCESS DESCRIPTION:

The Thoroughbred Generating Company, is to include two (2) Pulverized Coal-fired steam generating units which are to operate in combined cycle mode with a nominal output capacity of 750 megawatts (MW) each.

EMISSION AND OPERATING CAPS DESCRIPTION:

The plant will be operating year round thus 8760 hours per year. The permittee shall install, operate selective catalytic reduction (SCR) in conjunction with low NO_X burners to reduce NOx emissions to levels below those required by recent EPA proposed regulations regarding ozone, and to meet the most stringent NO_x emission limitation in the RBLC from Emission Units #1 and #2. The NOx emission limitation is set at 0.090 lb/MM BTU based on a 30 day rolling average and is considered beyond BACT for this type of steam generating units.

Proper boiler design and operation is BACT for CO emissions. The CO emissions shall not exceed 0.10 lbs/MMBTU from each unit based on a thirty (30) day rolling average.

The Pulverized Coal Boiler process using limestone injection with a baghouse is chosen as BACT for SO_2 and acid gas control. A SO_2 emission limitation of 0.167 lb/MM BTU from each unit based on a thirty (30) day rolling average is considered BACT for this type of boiler design and fuel use.

A baghouse is chosen as BACT for PM_{10} , fluorides, lead, mercury and beryllium control for the PCB boiler and for particulates from the material handling system for coal and limestone. A PM/PM_{10} emission limitation of 0.0180 lb/MM BTU from each unit based on a three hour block average is considered BACT for this type of boiler design and fuel use.
This includes the emissions from the cooling towers, surge bins, mill/dryers, and the coal crushers. Fluoride emissions shall not exceed 0.000159 lbs/MMBTU from each unit. Lead emissions shall not exceed 0.00000386 lbs/MMBTU from each unit. Mercury emissions shall not exceed 0.00000321 lbs/MMBTU from each unit. Beryllium emissions shall not exceed 0.000000944 lbs/MMBTU from each unit.